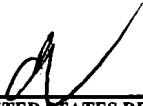




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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,102	09/09/2003	Kelly A. Dunn	05408/100L619-US1	9954
7278	7590	07/09/2007		
DARBY & DARBY P.C. P.O. BOX 770 Church Street Station New York, NY 10008-0770			EXAMINER COTTON, ABIGAIL MANDA	
			ART UNIT 1617	PAPER NUMBER
			MAIL DATE 07/09/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/658,102	Applicant(s) DUNN ET AL.	
	Examiner Abigail M. Cotton	Art Unit 1617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 May 2007.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 5-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 27 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/12/2004</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This office action is in response to the remarks submitted on May 14, 2007.

Claims 1-28 are pending in the application, with claims 5-26 being withdrawn as drawn to a non-elected invention and/or non-elected species of invention. Accordingly, claims 1-4 and 27-28 are being examined on the merits herein.

#### ***Priority***

Applicants' claim of priority to U.S. Provisional Application Serial No. 60/409,692, filed September 9, 2002, is acknowledged.

#### ***Election/Restrictions***

Applicant's election of the claims of Group I, namely claims 1 (in part), 2-8, 27 (in part) and 28 (in part), as well as the species of agent in the combination that is sodium carbonate, in the reply filed on May 14, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The restriction requirement is deemed proper and is made final. Claims 5-26 are withdrawn as being drawn to a non-elected invention and/or non-elected species of invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 200 17 213 U1 to Henkel-Ecolab, published December 21, 2000.

The publication by Henkel-Ecolab teaches a disinfection composition and method to combat mites (see abstract, in particular.) Henkel-Ecolab teaches that dust mites are capable of causing asthma and allergic reactions (i.e. reactions to allergens) (see page 2, final full paragraph, in particular), and that household items such as carpets and beds can be sources of allergies to allergic people because of such mites (see page 3, final full paragraph, in particular.) Henkel-Ecolab teaches that the mite-biocide composition taught therein is capable of attacking even resistant forms of house mites (see page 4, first full paragraph, in particular.) Henkel-Ecolab teaches that the composition can be

used to disinfect surfaces of housemites and their eggs (see page 7, final full paragraph), and thus is considered to teach applying the composition to allergens to control the allergens, as recited in claim 1.

Henkel-Ecolab teaches that the mite-biocide composition comprises an alkylpropylenediamine of the formula:



where  $R^1$  can be an alkyl group or alkylene group having from 8 to 18 carbon atoms, and  $R^2$  can be hydrogen, an alkyl group having from 1 to 4 carbon atoms, or an aminoalkyl group having from 2 to 4 carbon atoms (see page 4, in particular.) Thus, Henkel-Ecolab teaches the composition can have a compound that meets the limitation of having  $R^1$  as a  $C_1$  to  $C_{18}$  alkyl and  $R^2$  and  $R^3$  can be  $-(CH_2)_3NH_2$ , as recited in parts (a) and (b) claim 1.

The publication to Henkel-Ecolab does not specifically exemplify a composition having a tertiary amine that meets the limitation of the formula specified in parts (a) and (b) of claim 1.

However, as Henkel-Ecolab teaches that compounds having a general structure that includes those claimed could be used in the mite-biocide composition, it is

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considered that one of ordinary skill in the art at the time the invention was made would have found it obvious to provide the compound as claimed in the method of disinfecting and removing allergens from dust mites, as taught by Henkel-Ecolab, with the expectation of providing a compound suitable for the disinfecting method.

Regarding the recitation that the method involves applying "an anti-allergenic effective amount" of the anti-allergenic agent, as recited in claim 1, it is noted that as the publication to Henkel-Ecolab teaches that the composition is being used to disinfect and remove mites and mite eggs, and thus to remove the source of allergens, it is considered that the compositions of Henkel-Ecolab necessarily contain an "anti-allergenic effective amount," as recited in the claim.

Regarding claim 2, Henkel-Ecolab renders obvious providing a compound that meets the limitations of the tertiary amine having the formula recited in the claim, as discussed above.

Regarding claim 27, Henkel-Ecolab teaches a method of controlling allergens by applying an anti-allergenic effective amount of the tertiary amine as claimed, as has been discussed above. Henkel-Ecolab teaches that the composition can be used to disinfect surfaces of housemites and their eggs (see page 7, final full paragraph), and thus it is considered that the publication teaches applying the composition to a substrate (surfaces) to control the allergens, as recited in the claim.

Regarding claim 28, Henkel-Ecolab teaches that in one embodiment, disinfection of the surfaces with the composition can be followed by vacuuming of the surfaces (see page 9, first full paragraph, in particular.)

Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 200 17 213 U1 to Henkel-Ecolab, published December 21, 2000, as applied to claims 1-2 and 27-28 above, and further in view of U.S. Patent No. 6,080,792 to Zocchi et al, issued June 27, 2000.

The publication to Henkel-Ecolab is applied as discussed above, and teaches a disinfecting composition and method that renders obvious a method of controlling allergens by applying an anti-allergenic agent that is one of the tertiary amines as recited in parts (a) and (b) of claim 1. Henkel-Ecolab further teaches that the composition can be in the form of a foam (see page 9, first full paragraph, in particular.)

Henkel-Ecolab does not specifically teach that the disinfecting solution comprises the elected species of combination agent that is sodium carbonate, as recited in part (b) of claim 1 and claim 3.

Zocchi et al. teaches a foam cleaning composition suitable for killing dust mites that comprises an acaridical agent (i.e. a mite biocide) (see abstract, in particular.)

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Zocchi et al. teaches that such compositions can comprise an alkali metal builder, such as sodium carbonate (see column 2, lines 1-15, in particular.)

Accordingly, it is considered that one of ordinary skill in the art would have found it obvious to provide the sodium carbonate and/or foam carrier composition of Zocchi et al. in the disinfecting method and composition of Henkel-Ecolab, because Henkel-Ecolab teaches components capable of disinfecting and controlling mites, which composition can be in foam form, and Zocchi et al. teaches that sodium carbonate is suitable as a builder in foam compositions, and teaches a foam composition containing sodium carbonate suitable for use as a carrier for a mite-biocide. Thus, one of ordinary skill in the art would have been motivated to provide the sodium carbonate and/or the foam carrier comprising sodium carbonate in the disinfecting method of Henkel-Ecolab, with the expectation of providing a builder for a foam and/or foam carrier itself suitable for controlling mites. Accordingly, claim 3 is obvious over the teachings of Henkel-Ecolab and Zocchi et al.

Regarding claim 4, Zocchi et al. teaches that the foam compositions can contain from 0.5 to 5% by weight of the alkali metal builder (see column 2, lines 1-10, in particular), and teaches that an amount of the acaricidal agent can be from 0.1 to 5% (see column 2, lines 15-20, in particular.) Furthermore, it is considered that one of ordinary skill in the art at the time the invention was made would have found it obvious to vary and/or optimize the amounts of active agent and alkali metal builder in the



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composition, and thus to vary and/or optimize the ratio of the components, according to the guidance provided by Henkel-Ecolab and Zocchi et al, to provide a composition having desired properties, such as desired anti-allergenic properties. It is noted that "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955.)

### ***Conclusion***

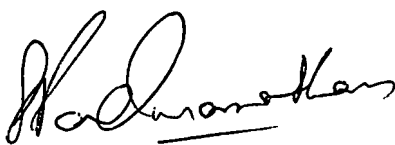
No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abigail M. Cotton whose telephone number is (571) 272-8779. The examiner can normally be reached on 9:30-6:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMC



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SUPERVISORY PATENT EXAMINER